

## ABSTRACT

A system and method for determining a location. The system employs encoded information devices dispersed through the environment, each having a non-unique code associated therewith. The codes from the encoded information devices are acquired as a reading device passes nearby, and stored. The codes from a proximate set of information devices are correlated with a map or mapping relation to determine one or more consistent positions within the environment. The information devices are preferably passive acoustic wave transponders, and the mapping relation may be a pseudorandom sequence or a defined map.